Missoula Field Office

2004

Fire Management Plan

Developed By: _____ _____
Field Office Fire Management Officer Date

Recommended By: _____ _____
Field Manager Date

Approved By: _____ _____
State Director Date

TABLE OF CONTENTS

I. INTRODUCTION

A. Purpose

The FMP addresses all aspects of fire management in the Missoula Field Office(MiFO), including fuel reduction treatments on wildland urban interface (WUI) lands, rural fire assistance, prescribed fire, fuels management and fire prevention and suppression. The FMP also identifies the MiFOs fire management goals and objectives for four Fire Management Units.

B. Compliance with Land Use Plans and National Environmental Policy Act

This plan is consistent with and implements decisions for the Fire Program found in the Garnet Resource Management Plan and Environmental Impact Statement (Garnet RMP/EIS) as amended.

The FMP is a strategic document that does not make resource management decisions or project specific implementation decisions and therefore is categorically excluded from further NEPA analysis (Categorical Exclusion 516 DM2, Appendix 1, Chapter 2, 1.10). Prior to implementing fire or fuels management projects on-the-ground, additional environmental analysis will be completed and compliance with other federal and state regulatory requirements arising from laws such as the National Historic Preservation Act, the Endangered Species Act, the Clean Water Act and the Clean Air Act will be required

C. Collaboration

The FMP is a strategic document required by the Garnet RMP (page 39) which provides direction for fire and fuels management actions. The Garnet RMP was developed with input from and consultation with representatives from the Bureau of Indian Affairs (BIA), US Fish and Wildlife Service (FWS), Forest Service (FS), the State of Montana, and interested citizens.

The FMP has been discussed with and complements fire and fuels management policy and actions being taken by the Lolo, Beaverhead-Deerlodge and Lewis and Clark National Forests, the Montana DNRC's South West Land Office, the Southwest Zone of the Northern Rockies Coordinating Group and departments within Missoula, Powell and Granite County government.

D. Authority

The following federal laws apply to fire and fuel management:

- Protection Act of September 20, 1922 (42 Stat. 857; U.S.C. 594).
- Taylor Grazing Act of June 28, 1934 (48 Stat. 1269; U.S.C. 315).

- Reciprocal Fire Protection Act of May 27, 1955(69 Stat. 66; 42 U.S.C. 1856, 1856a).

- Economy Act of June 30, 1932 (47 Stat. 417; 31 U.S.C. 686).

- The Federal Land Management and Policy Act of 1976 (FLPMA) (Public Law 94-579; 43 U.S.C. 1701).

- Disaster Relief Act, Section 417 (Public Law 93-288).

- 2001 Annual Appropriations Acts for the Department of the Interior.

The following inter-agency and Bureau-wide policies and guidance applies to fire and fuels management:

- United States Department of the Interior Manual (910 DM 1.3).

- 1995 Federal Wildland Fire Management Policy.

- 2001 Updated Federal Wildland Fire Management Policy (1995 Federal Wildland Fire Management Policy Update).

- 1998 Departmental Manual 620 Chapter 1, Wildland Fire Management General Policy and Procedures.

- 2004 Instruction Memorandum No 2004-184 for implementing post-fire Emergency Stabilization and Rehabilitation (ESR) actions.

II. NATIONAL AND BUREAU-WIDE FIRE MANAGEMENT POLICY DIRECTION AND GOALS

A. National policy and direction for the fire and fuels management programs can be found in:

- The 1998 BLM Handbook 9214, "Prescribed Fire Management" describes authority and policy for prescribed fire use on public lands administered by the Bureau of Land Management.

- The 1995 Federal Wildfire Management Policy as updated in 2001.

- September 2000, "Managing the Impacts of Wildfires on Communities and the Environment."

- October 2000, National Cohesive Strategy goal is to coordinate an aggressive, collaborative approach to reduce the threat of wildland fire to communities and to restore and maintain land health.

- August 2001, "Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment -10 Year Comprehensive Strategy" provides a foundation for wildland agencies to work closely with all levels of government, tribes, conservation, and commodity groups and community-based restoration groups to reduce wildland fire risk to communities and the environment.

- May 2002, "Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment, 10 Year Comprehensive Strategy – Implementation Plan".

- August 2002, "Healthy Forests - An Initiative for Wildfire Prevention and Stronger Communities".

- 2004 Instruction Memorandum No 2004-184 which addresses planning and implementing post-fire Emergency Stabilization and Rehabilitation (ESR) actions.

B. The overarching goals for the fire and fuels management program on public lands are:

- Human Life and Safety: Protect human life and the safety of both the public and firefighters. This is the single, overriding priority in wildfire fire management.

- Property and Resources: Protect human communities, their infrastructure, and the natural resources on which they depend. Other property and improvements will be protected.

- Wildlife, including Special Status Species (Federally Threatened, Endangered, Proposed, and Candidate Species, BLM Sensitive Species and State Species of Concern): Protect, maintain, preserve, and/or restore habitats necessary for the conservation of species, and the ecosystems upon which they depend, to maintain viable and diverse populations of native terrestrial and aquatic species including special status species.

- Vegetation: Improve ecosystem health and maintain or restore the range of conditions in which native plant communities thrived and evolved.

- Cultural, Historical and Paleontological: Protect high value cultural, historical and paleontological resources.

- Designated Special Areas: Protect the characteristics that warranted designation of Areas of Critical Environmental Concern (ACECs), Special Recreation Management Areas (SRMAs), Wilderness Areas, Wilderness Study Areas (WSAs), National Monuments and National Conservation Areas.

C. Resource Protection Requirements

- Air: Meet federal and state air quality standards through proper management of emissions.

- Threatened and Endangered Species: Ensure that non –emergency actions taken by BLM will not reduce the likelihood of survival or recovery of any listed species or destroy or adversely affect these species.

- Water: Meet Federal and State water quality standards and prevent water degradation by using Best Management Practices during and after fires and fuels treatments.

- Visual: Meet established Visual Resource Management (VRM) class objectives in project plans for fuel reduction treatments. VRM objectives will also be considered when developing burned area emergency stabilization and rehabilitation proposals.

- Public Lands Health: Meet Standards for Public Lands Health through appropriately planning fuel reduction treatment projects.

D. Resource Use Objectives

Vegetation: Fire and fuels management actions will be taken:

- to reduce fuel loading in forest, shrub, and grass lands that are characterized as Fire Regime Condition Class (FRCC) II and III (see Appendix 10 for a description of FRCC's.
- where fire regimes have been moderately to significantly altered from their historical ranges.
- where there is a moderate to high risk of losing key ecosystem components due to lack of fire or the likelihood of unnaturally severe fire.
- where vegetative attributes have been significantly altered from their historical range of variability.
- where fire return frequencies have departed from their historical frequencies by more than one return interval.
- where fire suppression and other management practices have resulted in a high probability of unwanted disturbance by fire, insect or disease.

Wilderness/Wilderness Study Areas: There are currently no Wilderness Areas administered by the MiFO. There are three Wilderness Study Areas in the MiFO and fire and fuels management will strive to avoid unnecessary impairment that would affect the suitability for possible future Wilderness designation of these areas.

III. WILDLAND FIRE MANAGEMENT STRATEGIES

A. General Management Considerations

1. Fire Suppression Responsibilities.

Under terms of an agreement entered into by the Montana State Director and Regional Forester, Northern Region United States Forest Service on February 18, 1982, wildfire suppression agencies agreed to aid/cooperate in the suppression of wildfires. This agreement is referred to as the BLM/FS Master Agreement. On December 1, 1986, the State Director and Regional Forester also agreed to implement Phase II of the BLM/USFS Protection Adjustment. At that time the Butte District was directed by Instruction Memorandum No. MT-87-68 to proceed with developing operating plans with adjoining National Forests to implement Phase II.

On February 3, 1987, an operating plan for fire protection exchange adjustments was agreed to by District Managers for Butte and Lewistown. Also concurring with the fire protection exchange adjustment were the Forest Supervisors of the Beaverhead, Deerlodge, Gallatin, Helena, and Lolo National Forests. Effective that date, the Butte District's public lands of approximately 1.4 million acres became the wildfire protection responsibility of the Forest Service. The Forest Service then entered into an agreement with the Montana Department Natural Resources and Conservation (DNRC), to have the DNRC assume protection responsibility on a portion of the public lands. All parties to this agreement currently work under the Cooperative Fire Management Agreement (Six Party Agreement), dated March 1998.

BLM, USFS and DNRC jointly enter into and Annual Operating Plan (AOP) for Fire Protection by June 1 each year which provides specific direction to DNRC and FS for suppression actions taken on public lands administered by the MiFO and a small acreage administered by the Butte Field Office. The AOP sets out the procedure dealing with initial attack, escaped fire, and large fire management. The AOP also requires the protection agencies (DNRC and USFS) to abide by the site-specific heavy equipment restrictions and other constraints found in this FMP.

2. Wildland Urban Interface

The operational roles of the BLM in the wildland/urban interface are wildland firefighting, hazardous fuels reduction, cooperative prevention and education, and technical assistance. Structural fire suppression is the responsibility of tribal, State, or local governments, as described in the Interagency Standards for Fire and Fire Aviation Operations.

3. Agency Administrator and Employee Roles

Agency Administrators will ensure employees are trained, certified and available to participate in the wildland fire program locally, regionally, and nationally as the situation demands, as described in the Interagency Standards for Fire and Fire Aviation Operations.

4. Fire Management Program Evaluation

As required in the Interagency Standards for Fire and Fire Aviation Operations, the Missoula Field Office will evaluate its program annually to ensure accountability, facilitate resolution of conflict, and identify resource shortages and priorities. This process will be facilitated through the annual review of interagency operating agreements, the completion of readiness reviews, formal program reviews, the Fire Program Analysis (FPA) process, and by performing after action reviews of fuels management projects by the fuels ID team.

B. The Role of Fire in West Central Montana

1. Background

Historically, fire was the dominant disturbance agent within the coniferous tree cover types associated with what are currently BLM (and Forest Service) lands in Western Montana. The fire regimes within these forested types are complicated and diverse. Fire can benefit several conifer species by aiding in reproduction, maintaining stand density within a site's specific carrying capacity (which also functions to reduce inter-tree competition), by reducing insect and disease epidemics and by cycling nutrients on the site. A variety of shrub, grass and forb species, important components of wildlife habitat, also depend on fire to varying degrees. Conversely, fire can adversely affect forest communities through high intensity fires which result in high mortality of conifers in forest communities and which can cause widespread severe erosion, mass wasting, the long-term loss of site productivity and other detrimental environmental effects.

2. Area Description

There are approximately 140,900 acres of public land in the MiFO. Approximately 108,500 acres or 77 percent of the lands managed by the field office are classified as the coniferous tree cover types. Approximately 7 percent or 9,900 acres of land within the field office is classified as grassland or shrub/grassland. Of the remaining 16 percent (approximately 22,500 acres) most lands are scree or rock and about 3 percent are aquatic and riparian habitats.

3. Fire Ecology

An understanding of fire frequency and severity prior to fire suppression efforts and how it relates to vegetative cover types is important in order to manage wildfire and prescribed fire within the field office. In general, the plant communities native to West-Central Montana have a mixture of fire tolerant, fire intolerant and fire dependent species represented. Therefore disturbance, or lack of disturbance, by fire has been one of the most important factors determining the species composition, structure and patterns of plant communities on public lands and other 'wildlands' in this area.

a. Conifer Cover Types:

Table 1 describes fire frequency and fire severity within specific coniferous cover types which occur in the Field office. The Table illustrates the important and complex role fire historically played across landscapes in west central Montana. It also provides insight into how fire functions as a disturbance force and what affects fire has on plant communities in this area. Fire's historical role will be an important consideration when prescribing and managing fire in the Field office.

Table 1: Natural Fire Frequency and Severity for Coniferous Tree Cover Types

Fire Group*	Cover Type Description	% of Area	Fire Frequency	Severity**
4	Warm, dry Douglas-fir habitat types. Commonly characterized as fire-maintained open ponderosa pine stands that develop Douglas-fir regeneration beneath pine in absence of disturbance. Potential big-game winter range value is high.	10%	5-25 yrs	NL
5	Cool, dry Douglas-fir habitat types. Douglas-fir often dominates all successional states. In absence of fire, dense Douglas-fir understories may develop.	5%	35-45 yrs	NL-M
6	Moist Douglas-fir habitat types. Commonly characterized as fire-maintained relatively open western larch and ponderosa pine stands which support substantial amounts of Douglas-fir even when subjected to periodic fire. Potential timber productivity and big-game winter range values are moderate to high.	40%	15-45 yrs	M-L
7	Cool habitat types usually dominated by lodgepole pine. Includes stands in which fire maintains lodgepole pine as dominant seral as well as a persistent dominant species. Potential big-game summer-fall range values are high.	30%	50-150 yrs	L-M
9	Moist, lower subalpine habitat types characterized by infrequent, severe fire regimes which created stands of emergent western larch over relatively dense mixed conifer understories. Potential timber productivity and big-game summer-fall range values are high.	15%	50-300 yrs	M-L

* Fisher and Bradley, 1987. *See Fire Ecology of Western Montana Forest Habitat Types (Fisher and Bradley 1987) for a more detailed description of each fire group. See Appendix 3 for a list of Habitat Types in each fire group.*

** NL-Non-lethal, L-Lethal, & M-Mixed Severity Fire Regimes.

b. The Role of Fire in Rangelands; Grass and Shrub Cover Types:

Grass and shrub cover types in the MiFO encompass approximately 9,500 acres. Nearly all of these habitats are found on west and south aspects between 4,000 and 6,500 feet elevation. Most are grazed during the summer by livestock and nearly year around by deer, elk and bighorn sheep. Big sagebrush (Artemisia tridentata) is the most common shrub while bluebunch wheatgrass (Agropyron spicatum), Idaho fescue (Festuca idahoensis), rough fescue (Festuca scabrella) and Columbia needle grass (Stipa columbiana) are the most common grasses in these habitats.

Historically, fire played an important role in the composition and condition of these plant communities. The effect of fire on grass cover types is largely determined by plant species composition, the season of the burn, vigor of the plants, amount of litter on the ground, soil moisture, and precipitation events and post-fire. Burning in mid-summer is usually most detrimental to bunchgrasses, while spring burning is the least detrimental. Most grass and forb species recover from the effects of burning within three years if post-fire grazing is properly managed.

The affects of fire in the shrub cover types is depends primarily on the species composition, shrub density and ground litter density. Big sagebrush (Artemisia Tridentata) is not fire tolerant and burning will often reduced big sagebrush density for 10 years or more. Other sagebrush species such as silver sagebrush (Artemisia cana) and three-tipped sagebrush (A. tripartita) will resprout after fire resulting in greater densities of sagebrush than before the fire. Willows (Salix spp) typically sprout after being burned while other shrubs valuable as forage can be killed by burning.

Also of concern is the tendency of wildland fire and mechanical disturbances to help propagate and spread non-native invasive species, especially in rangeland and dry forest habitats. Prevention and control of invasive species is discussed later in this plan.

c. Aquatic and Riparian Habitats

Within the forest cover types described in Table 1 and the grass and shrub cover types are networks of riparian zones, including perennial and intermittent stream channels, springs, seeps, ponds, bogs, etc. For the purpose of this Plan, riparian zones are defined as the area within the active stream channel and floodplain combined with an adjacent zone of interaction between the channel and vegetation (in forested systems, generally the height of one site-potential tree). Within these distinct riparian networks, vegetative communities, soil types, moisture regimes, and therefore, fire frequency and susceptibility, may differ markedly from the surrounding environment.

Trout native to Western Montana (such as bull and westslope cutthroat trout) evolved in a dynamic environment. Wildfires, ranging from small acreage, low intensity under-burns to large, stand-replacing events, were a part of this environment, as were the stochastic events such as landslides that commonly followed. The historic fire regime can be characterized as a "pulse" disturbance pattern, in which events occur at one time with no further direct effects to aquatic or riparian habitats. It is likely that sub watershed extirpations of fishes followed large-scale, intense wildfires; however, regional populations were strong enough to provide individuals to quickly re-colonize once impacted areas recovered.

Fish populations most likely to be affected by the fires themselves are resident fishes of smaller streams: resident bull trout, westslope cutthroat trout, and sculpins. Resident fishes are entirely dependent on available habitat and stochastic events such as fires have been identified as a threat to these small, resident populations (Rieman and MacIntyre 1993). In contrast, migratory fishes with access to larger streams (such as fluvial bull and westslope cutthroat trout) are more resilient to these environmental effects.

Over the past century, the disturbance cycles under which fishes evolved have changed substantially. Current patterns could be better described as a chronic or "press" pattern, with continual, direct effects to the aquatic environment and associated fish species. As a result, the capacity of fishes to withstand both the direct and indirect effects of wildfire has substantially diminished. Fishes already physiologically stressed are substantially less able to survive the additional increases in water temperature, inputs of fine sediments, or changes in hydrologic regimes that may follow wildfires. Furthermore, populations of native fishes are substantially reduced from historic levels, resulting in fewer "expendable" individuals and less fishes available to replenish populations elsewhere. Re-colonization may also be hampered by barriers to migration, including culverts, roads, and dams.

While wildfire and its direct and indirect effects have long been factors in the aquatic and riparian ecosystems, the diminished physiological capacity of regional fishes, lack of available refugia, and low numbers of individuals may limit post-fire re-colonization of burned or treated watersheds. The impacts of fire and mechanical fuel management actions on aquatic and riparian environment need to be carefully evaluated for all Fire Management Units.

C. Guidance from the RMP and Recommendations from Watershed Assessments

Fire Suppression: The Standard Operating Procedures for the Fire Program as stated in the Garnet RMP are "to establish areas in which the appropriate suppression action of control or confinement will be implemented for all fire starts." "Approval of the fire management plan (this Plan) will be based on consideration of the values at risk; fire behavior; fire occurrence; beneficial fire effects; including but not limited to a reduction in fuel loading; fire suppression costs; and consistency with other agency plans and policies."

Watershed Assessments which examine the past and present conditions and make recommendations for desired future conditions (DFCs) for all the renewable resources are being prepared by the MiFO. Fuel loading, the probability, extent and intensity of wildfire are evaluated in these assessments. Because wildfire may move some sites toward DFCs, these assessments will be used tohelp select the appropriate response to unplanned ignitions and for selecting locations and assigning priorities for fuel management actions.

D. Wildland Fire Management Goals

The following goals and ways to achieve these goals will be used to direct the wildfire and fuels management program in the Missoula Field Office.

Goal: Provide for firefighter and public safety as the highest priority in every fire management activity.

To achieve this goal the MiFO will identify, assess and reduce risks and hazards that may pose a threat to firefighters and members of the public involved in wildfire and fuels management projects. Every red carded firefighter will complete Fireline Safety Training each year and BLM's standard safety procedures for both emergency fire suppression and project implementation will be followed.

Goal: Hazard reduction around the urban interface.

To achieve this goal the MiFO will work collaboratively with communities at risk within the Wildland Urban Interface (WUI) to develop plans which reduce the risk of wildland fire. Hazardous fuels will be reduced using mechanical treatments and prescribed fire where applicable around communities at risk from wildfire.

Goal: Suppress all unwanted wildland fires with minimum cost, using an appropriate suppression response, while protecting values at risk.

Goal: Manage wildland fire to protect, maintain and enhance public resources, and as nearly as possible and allow fire to function in its ecological role when appropriate for the site and situation.

To achieve these goals the MiFO will select one of the following Appropriate Management Responses (AMR) taken from Chapter 10, pages 5 and 6 of the 2004 Interagency Standards for Fire and Aviation (aka the Red Book).

1. Monitoring from a distance.
Fire situations where inactive fire behavior and low threats require only periodic monitoring from a nearby location or aircraft.

2. Monitoring on-site.
Fire situations that require the physical placement of monitors on the fire site to track the fire's spread, intensity, and/or characteristics.

3. Confinement.

Actions taken when fires are not likely to have resource benefit and an analysis of strategic alternatives indicates threats from the fire do not require costly deployment of large numbers of suppression resources for mitigation or suppression. Typically these fires will have little to no on-the-ground activity and fire movement remains confined within a pre-determined area bounded by natural barriers or fuel changes.

4. Monitoring plus contingency actions.

Monitoring is carried out on fires managed for resource benefits but circumstances necessitate preparation of contingency actions to satisfy external influences and ensure adequate preparation for possible undesirable developments.

5. Monitoring plus mitigation actions.

Actions on fires managed for resource benefits that either pose real, but not necessarily immediate, threats or do not have a totally naturally defensible boundary. These fires are monitored but operational actions are developed and implemented to delay, direct, or check fire spread, or to contain the fire to a defined area, and/or to ensure public safety (through signing, information, and trail/area closures).

6. Initial Attack.

Action where an initial response is taken to suppress wildland fires, consistent with firefighter and public safety and values to be protected.

7. Large fire suppression with multiple strategies.

This action categorizes fires where a combination of tactics such as direct attack, indirect attack, and confinement by natural barriers are utilized to accomplish protection objectives as directed in a Wildland Fire Situation Analysis (WFSA).

8. Control and extinguishment.

Actions taken on a fire when the selected WFSA alternative indicates a control strategy using direct attack. Sufficient resources are assigned to achieve control of the fire with a minimum of acres burned.

Appropriate Management Responses (AMR) and action points will be based on fire activity and location. The AMR will be selected using guidance found in Section IV of this Plan and in the RMP and by evaluating each option according to the following criteria which were taken from Chapter 10, page 5 of the 2004 'Red Book":

a. Risk to firefighters and public health and safety
b. Land and Resource Management Objectives
c. Weather
d. Fuel Conditions
e. Threats and values to be protected
f. Cost efficiencies.

While Options 6, 7, and 8 which call for initial attack, large fire management, and control and extinguishment have been the standard response to all unplanned ignitions in the MiFO for many years, other options may be considered which comply with the RMP and Federal Wildland Fire Management Policy.

For small fires, fire management objectives and fires suppression tactics will be determined by the incident commander and the BLMs resource advisor if one is assigned to the incident.

For larger fires, an AMR will be jointly selected and documented in the WFSA by BLM protection responsibility-, and, if assigned, the Incident Commander (IC)/Incident Management Team (IMT) after reviewing the fire management guidance and criteria for selecting an AMR. Given present conditions, it is unlikely that Option 1 would be selected. Option 2 could be selected if the safety of firefighters is a concern. Options 3 through 8 all have advantages and disadvantages which must be weighed by the BLM's staff and Field Manager, the protection agency and the Incident Commander or IC Team when developing and updating the WFSA.

Goal:Establish or update cooperative agreements to maximize coordination with agencies' cooperators.

BLMs MiFO, Western Zone Fire Management Officer (FMO) or BLMs MT/Dakota's FMO will review all existing agreements annually, updating or changing them as necessary to promote full cooperation in mutual fire management. The wildfire management program will foster good communication, cooperation and strive for effectiveness for all fire management activities at all levels. This approach will be used in working with other federal, state and local government agencies, cooperators and publics.

The MiFO will use an integrated approach to fire and vegetative resource management across the landscape and across jurisdictional boundaries wherever possible.

Goal: Restore habitats to Fire Regime Condition Class 1

To achieve this the MiFO will implement fuels management projects in areas rated as the highest priority for treatment. For over five decades an aggressive and effective fire suppression program has put out most of the wildland fires occurring MiFO administered public lands. Other management actions, in particular timber sales and livestock grazing, have changed the composition and structure of forested and rangeland habitats and consequently changed the 'typical' fuel loading in these habitats. Fire regime condition classes (FRCC) have been developed for forest and rangeland habitats that describe the degree of departure in: (1) vegetation structure, and (2) fire frequency/severity. This measure describes both the health of the fire regime, and also the appropriateness of the vegetation community for the site. Condition Class 1 corresponds to landscapes where these variables are intact, while Condition Class 3 landscapes have highly altered ecological integrity. Condition Class 2 includes lands having moderate departure in fire regime health and structural integrity.

Fire regime condition class broad scale mapping for the Missoula Field Office is complete and will be used for project level decisions for vegetation management.

E. Fire Management Units and Categories

This FMP establishes four distinct geographic areas called Fire Management Units (FMUs). Each FMU falls into one of the four categories –A through D –which establish the general fire management guidance and suppression strategies for the public lands within the FMU. This guidance will also be used to help select areas and formulate plans for fuels management treatments.

For each FMU, suppression objectives and appropriate management response were selected using the following criteria; the fire intensity level fire (FIL) that would be expected within the FMU; the contiguous acreage of the public land and its proximity to private in-holdings; the level of use by the public; the proximity to private residences and communities; wilderness values; accessibility; the historic fire regime; and any unique biological, cultural, historical or archeological resources within the FMU.

Fire management specialists in concert with other inter-disciplinary team members assigned a fire management category to each FMU and developed specific objectives and guidance for wildland fire and fuels management and the appropriate management response for each FMU.

The four fire management categories are as follows:

Category A. Areas where fire is not desired at all. **There are no FMU's in this Category**.

> Suppression Strategy -Use Appropriate Management Response (AMR) to suppress all fires in accordance with management objectives based on current conditions and fire location. Emphasis is on rapid suppression responses and techniques. Multiple fire day priority is Highest.
>
> Rationale for Categorization- Direct threats to life or property; broken ownership pattern with scattered tracts adjacent to multiple jurisdictions; ecosystem is not fire dependent; long fire return intervals.
>
> Fire/fuels Management Activities- Mitigation and suppression required; fire should not be used to manage fuels.

Category B. Fire plays natural role in the function of the ecosystem; however these are areas where unplanned ignitions could cause negative effects because of current conditions. **The Clark Fork Front and Flint Rock FMUs are in Category B .**

Suppression Strategy-Use AMR to suppress all fires in accordance with management objectives based on current conditions and fire location. Implement the full range of wildland fire and fuels management practices, including prescribed fire, mechanical, chemical, biological, and cultural treatments that will move all affected landscapes toward desired future condition as described in the RMP. AMR strategies would be tailored to address areas where plant communities are at risk due to current conditions/time of year or other ecological constraints. Multiple fire day priority is high.

Rationale for Categorization- Unplanned ignitions would have negative effects on ecosystems unless mitigated.

Fire/fuels Management Activities- Suppression required; fire and non-fire fuels treatments may be used.

Category C. Areas where wildland fire is desired but where there are significant constraints that must be considered for its use**. The Blackfoot and Hoodoos FMU are in Category C.**

Suppression Strategy-Use AMR to implement protection objectives in accordance with management objectives based on current conditions and fire location. Implement the full range of wildland fire and fuels management practices, including prescribed fire, fire use, mechanical, chemical, biological, and cultural treatments that will enhance or maintain desired conditions as described in the RMP. AMR strategies would be tailored to address areas of significant constraints including Areas of Critical Environmental Concern (ACECs), critical habitat for T&E species, areas of soil instability, and areas of other critical resource constraints. Multiple fire day priority is medium.

Rationale for Categorization- Significant ecological, social, or political constraints exist.

Fire/fuels Management Activities- Suppression required; fire and non-fire fuels treatments may be used.

Category D. Areas where wildland fire is desired and there are few or no constraints for its use. **There are no FMU's in this category.**

Suppression Strategy-Use AMR to implement fire use objectives in accordance with management objectives based on current conditions and fire location. Wildland Fire Implementation Plans (WFIP) will be prepared to meet management objectives for fires managed for resource benefits. Multiple fire priority would be lowest.

Rationale for Categorization- Few ecological, social, or political constraints exist. There is less need for fuels treatments.

F. Wildland Fire Use

Although the use of wildland fire for resource benefit can be an appropriate management response, Options 1 and 2, the MiFO currently does not have any approved plans allowing it to use fire for resource benefit. Fire Use Plans for the Wales Creek WSA and the Hoodoos WSA will be written in the future.

G. Fuel Management

Treatment Targets: In September 2003 the Montana State Director signed the Record of Decision for the *Fire/Fuels Management Plan Environmental Assessment/Plan Amendment for Montana and the Dakotas*; this plan amendment updates all the RMPs in the state to improve implementation of the National Fire Plan and 2001 Federal Fire Policy. Anticipated fuels treatment levels in acres were listed by FMU category in the 2003 EA and Plan. No acreage targets were tied to a specific RMP. The Garnet RMP states that "Prescribed fire will not be used on approximately 5820 acres adjacent to stream channels and within developed or potential recreation sites." There are no other RMP level restrictions on the acreage were prescribed burning may occur. Currently, watershed scale assessments identify fuel conditions and the probability and intensity of fire. Specific treatments to reduce risk are subsequently proposed as projects and taken through the planning and clearance steps.

The MiFO is currently completing a Risk Assessment and Mitigation Strategies (RAMS) assessment for the field office. Once the RAMS assessment is completed it will outline a fuels management program of work for the next decade which will provide the approximate acreages by type of treatment by year.

H. Constraints on Fire and Fuels Management Actions

There are numerous program guidelines, best management practices, standard operating procedures, etc that constrain fire and fuel management actions. These appear in the Garnet RMP, the 2003 Decision Record to amend the RMP. These constraints are intended to minimize or eliminate adverse effects of fire and fuels management actions on species of special concern -including T & E species-, terrestrial riparian and aquatic habitats/species and cultural and paleontological resources, etc. Part IV of this Plan discusses these constraints in detail.

All non-emergency actions will comply with NEPA, ESA, water, air quality and other applicable laws and regulations and guidance found in the RMP**.** The constraints found in Appendix 11, are taken from the 2003 *Fire/Fuels Management Environmental Assessment/Plan Amendment for Montana and the Dakotas*, will be used to design prescribed fire and other fuel management treatments. **It is important to note** that, while these constraints will be applied to planned ignitions, they would not be mandatory during emergency wildland fire suppression operations if using them would compromise protection of life or property.

IV. FIRE MANAGEMENT UNITS DESCRIPTION AND GUIDANCE

A. Guidance Common to All Fire Management Units (FMUs)

The guidance listed in this section applies to all public lands administered by BLM in Missoula, Powell and Granite counties.

The policies, goals, objectives and guidelines cited earlier in this Plan and in the RMP will be used to plan, design and implement fire and fuel management projects. Environmental documents required by the National Environmental Policy Act, consultation required by the Endangered Species Act and other permitting or coordination required by Law or BLM Policy will be completed for all federal actions which are not classified as emergency operations. Examples of non-emergency actions are prescribed fire, mechanical fuel treatments and revegetation and weed control actions needed after wildfires.

1. Wildfire Prevention, Suppression and Rehabilitation

Each year an Annual Operating Plan for fire prevention, detection and suppression is reviewed, revised as needed and signed by BLM, the USFS and Montana DNRC. Under an agreement with the FS, the DNRC provides fire protection for the great majority of public lands under the jurisdiction of the MiFO.

a. Prevention:

Seasonal Fire Restrictions and Closures: Emergency fire restrictions and closures for Southwest Montana are coordinated with other land management and fire protection agencies through the Southwest Montana Zone of the Northern Rockies Coordinating Group. A Restrictions and Closure Plan for the Zone details how restrictions and closures will be applied to lands with similar fire danger ratings. The Zone coordinating group meets as needed to establish fire danger preparedness levels and discuss proposed restrictions or closures. When the group reaches consensus, the Missoula Field Manager approves restrictions on public lands to reduce the risk of man-caused fire and to reduce risk to public land users. The BLM State Director must approve all closure actions.

Off Highway Vehicles (OHV): Fire detection patrols are subject to OHV rules and travel off of established routes is limited to those activities critical for suppression activities.

Public Outreach for Prevention: As provided for in the Annual Operating Plan the USFS and DNRC are responsible for signing, Public Service Announcements and other public outreach efforts on the BLM lands which they protect. BLM law enforcement and other staff will assist in this outreach work.

b. Suppression

Appendix 11 provides guidelines intended to minimize or eliminate the adverse effects of suppression operations on public lands. These guidelines are taken from the July 2003 Fire and Fuels Management Environmental Assessment/Plan Amendment for Montana and the Dakotas.

In addition, the following will apply to all suppression actions:

Appropriate Management Response: Current direction calls for all fires occurring at a Fire Intensity Level (FIL) 1 thru 3 will be suppressed at less than 10 acres 90percent of the time. All fires occurring at FIL 4 thru 6 will be suppressed at less than 100 acres 75 percent of the time. Once this Fire Management Plan is approved, this direction could change to permit less aggressive initial attack response where less aggressive Appropriate Management Response is selected for managing newly detected small fires.

Resource Advisors: The Annual Operating Plan states that BLM will provide a Resource Advisor for fires that escape initial attack or which are burning in special management areas. The Resource Advisor is the Field Manager's representative on-the-ground and will work with the Incident Commander or the IC Team to develop incident objectives, strategies and tactics that reduce possible adverse effects of fire suppression operations.

Off Highway Vehicles (OHV): Mobile ground engines are allowed off-road for fire suppression without previous approval from BLM if live trees greater than 4 inches diameter at breast height (d.b.h.) are not cut. The use of vehicles and heavy equipment off established roads will conform to the Garnet RMP as amended, as well as the *Off-Highway Vehicle (OHV) EIS and Plan Amendment for Montana and the Dakotas*. Specific restrictions on the use of heavy equipment are included in the Annual Operating Plan.

An Appropriate Management Response could be selected under this Plan that would call for containment or another response that would reduce short or long-term adverse affects of OHV and earth moving equipment used to suppress fire on public lands. Minimum Impact Suppression Tactics (MIST, see Appendix 1) can also reduce surface disturbances and are called for in specific MA's and on specific sites later in this plan.

Cultural Sites Not Designated Management Area 11: The Field Office Archaeologist should be consulted for the location of significant sites, to identify avoidance areas for fireline construction and mop-up activities in and near cultural sites. Minimum Impact Suppression Tactics (MIST) should be used whenever suppression operations may affect a significant site. Generally, the use of earth moving/tillage equipment will be prohibited for wildfire suppression in all significant prehistoric, historic and paleontological site areas. If a significant *historic* site is being threatened because the site is projected to be in the fire's path, earth moving equipment can be used adjacent to the site. In addition, building protection measures such as a water sprinkling, foaming and heat shield wrapping systems should be used whenever feasible to protect significant historic buildings. Staging areas and fire camps should be located outside significant cultural area boundaries.

Because cultural and paleontological resources are sensitive information and their locations will not be widely distributed, it is very important to inform the Archaeologist of all new fires burning on or threatening public lands. If significant sites are in the wildfire area, appropriate measures, described in this Section or as discussed with the Field Office Archaeologist, will be taken.

It is against the law to collect artifacts or vertebrate fossils, including trace fossils, on public land unless directed to do so by the resource area Archaeologist. Cultural resources vary from prehistoric occupation sites to prehistoric lithic scatters to historic mining remnants to historic buildings and more. Most of the cultural resources in the Missoula Field Office have not been designated. The sites that are eligible for the National Register of Historic Places may or may not have been designated as Management Area 11 (MA-11), Historical & Cultural Sites in the Garnet RMP, but they will be in the future. Also, work will continue to evaluate sites as to their eligibility and MA-11designation.

c. Emergency Stabilization and Rehabilitation (ESR)

The most current ESR guidance will be used to plan, fund and implement ESR activities. Burned Area Emergency Rehabilitation Teams may be called on to assist Field Office ID teams to develop Emergency Stabilization and Rehabilitation (ESR) proposals and prepare NEPA, ESA and other documents as needed. The following guidance will be used to develop ES plans for the MiFO.

Cultural: Prior to implementation, a Class III cultural resource inventory will be conducted in the habilitation areas.

Fish, Aquatic and Riparian: Both wildfire and ESR operations can have an effect on fisheries and riparian and aquatic habitats. When these resources are affected, specialists in these fields will be part of ID Teams developing ESR proposals, NEPA and ESA documents, etc.

Soil Protection: Fire affects on soil vary and depend on numerous factors. Emergency Stabilization and Rehabilitation will be completed for all public lands which have been severely burned and may be completed for moderately burned lands. The ESR will prescribe measures needed to stabilize soils and prevent erosion or mass wasting. Refer to Appendix 4 for specific guidelines relating to soil protection and fire suppression activities.

Weeds: Fire tends to favor the germination, growth, and establishment of many noxious weeds now present in western Montana. Fire suppression activities and rehabilitation efforts can also introduce new noxious weeds. The Missoula Field Office Weed Management Plan sets out a course of action for noxious weed management and spells out how different species of weeds will be controlled, contained, and/or eradicated. A Decision Record on control of noxious weeds issued in the spring of 2004 may cover the incidental use of herbicides after a fire but may not cover large scale applications. Preventative measures are included in the weed management plan and, if followed, should reduce the accidental introduction of noxious weed seed during fire suppression or rehabilitation operations. See Appendix 6 for a list of preventive measures.

Threatened and Endangered Species: Standard procedures (consultation with USFWS) would be followed if ESR actions were determined to have an affect on listed species. Species of special concern would be identified and addressed in the NEPA documents prepared for these actions.

Salvaging Forest Products and Habitat Restoration: Each site burned by wildfire will be evaluated to determine if salvage and habitat restoration are needed. The Healthy Forest Initiative and the Healthy Forest Recovery Act provide specific guidance for planning and implementing fire restoration and fuel reduction projects. The environmental affects of salvaging forest products and reforestation will be assessed under NEPA. If desired future conditions for upland vegetation have been established for a site in a watershed assessment, those desired future conditions will provide the purpose and need for BLM's actions. Refer to Section III of this Plan for an explanation of how desired future conditions are established.

Grazing: The amount and timing of livestock grazing should be adjusted following a wildfire occurrence to maintain or make progress toward proper functioning range condition and encourage the full recovery of understory grasses and forbs. Determination of the type or duration of the livestock grazing adjustment post-fire would be on a site specific basis. At a minimum, rest prescribed in the ESR will be required.

2. Prescribed Fire and Other Fuels Management

The past 40 years, the BLM has used prescribed fire on the public lands in west-central Montana to reduce fuels by burning road and logging slash, to prepare forest sites for natural or artificial reforestation and to improve wildlife habitat. These actions were most often driven by a single discipline. More recently multi-disciplinary recommendations from Watershed Assessments have been used to establish desired future conditions for the public lands, including desired conditions for upland vegetation and riparian communities. Four Watershed Assessments (WA's) for the public lands in Powell, Missoula and Granite counties have been completed as of 2004; six additional assessments are scheduled, the final one to be completed prior to 2012.

Using the recommendations from Watershed Assessment, project plans are developed to implement treatments that will bring about desired future conditions. Desired future conditions for upland forested habitats often call for restoring stand conditions which were shaped by past fire regimes; see Section III for more information on historic fire regimes.

BLM often cannot manage fires of historic size and intensity because of adverse affects to public resources and the risk such events would present to private lands in the wildland-urban interface or to adjacent non-federal wildlands.

Therefore, to achieve desired future conditions for public lands, one or more mechanical treatments are often prescribed in combination with or instead of prescribed fire. Examples of these treatments include thinning/fuel augmentation followed by prescribed burning to reduce fuel loads or cutting and removing trees through commercial thinnings and sawlog harvest followed by prescribed burning. Prescribed burning is also used to prepare sites for reforestation, and to restore vigor to shrubs which sprout after fire.

This plan does not propose to implement any fire or fuel management treatments. Instead, site specific proposals will be developed and Environmental Assessments will be written. Decisions will be issued when NEPA and other planning requirements are completed. Prescribed burn plans or silvicultural prescriptions will be written. Burn plans will spell out vegetation and fire management objectives, conditions under which burning will be done and measures that need to be taken to ensure the success of the burn will be prepared and implemented. All projects proposals will conform to applicable Federal and State laws.

B. Fire Management Unit –Blackfoot Category/Number –C/1

Fire in the Blackfoot Fire Management Unit (FMU) is desirable but its use is complicated or limited due to urban interface, protection of cultural resources, air quality and other issues.

1. Location

This FMU lies east of Missoula in Missoula, Powell and Granite counties. The majority of the land in this FMU is in the Blackfoot River basin.

2. Characteristics

This Unit has a range of vegetation and topography from valley bottoms and gently sloping grasslands and shrub lands to foothills with mixed bunchgrass-conifer communities to steep, rocky forested slopes. The area includes approximately 379,000 acres of which 20 percent is BLM, 13 percent state, 63 percent private, 1 percent U.S. Fish and Wildlife Service and 3 percent US Forest Service. Montana Highway 200 and BLMs Garnet Range Road are the primary routes used to reach the numerous secondary roads which access the public lands in this FMU.

The majority of the lands managed by the BLM within this FMU are in three contiguous blocks: the Garnet Mountains, Marcum Mountain, and Lower Blackfoot River Corridor. Vegetative cover on the public lands is mostly coniferous forest and the dominant species are ponderosa pine, western larch, Douglas-fir, lodgepole pine, subalpine fir, Englemann spruce. Public lands in this FMU contain several ghost towns including Garnet Ghost Town, several Historic Mining Districts, and other cultural resources. The Lower Blackfoot Corridor is a heavily used recreation area with two overnight campgrounds and several day use areas on both BLM and Fish, Wildlife and Park ownership.

Wildlife species found here are typical of forested had rangeland habitats in the Northern Rockies. At least five endangered or sensitive species, bull trout, westslope cutthroat trout, bald eagles, and lynx occur in this FMU. The Garnet RMP designated two special management areas Bear Creek Flats ACEC and the Wales Creek WSA.

3. Wildfire History

Lightning is the predominate cause of unplanned wildfires in the FMU. Between 1980 and 2003 the following fires and burned acres were reported.

	Number of Fires	Acres Burned
Lightning	77	1418
Human	9	12

Fire season can start as early as mid-April in the lower elevations and last until mid-October. The occurrence of spring rains, in May and June typically dictate the severity of the summer fire season. The FMU supports a number of fuel complexes, including grass, ponderosa pine and missed-conifer.

4. Values at Risk and Resource Protection Constraints

Some of the Lower Blackfoot River Corridor tracks are in the wildland-urban interface due to the close proximity of the town of Potomac and numerous private homes on adjoining land. There are private homes on relatively small acreage surrounded by BLM and State owned land in Elk Creek and a group of private homes near the 5 mile marker on the Garnet Range Road. Other interface consists mostly of isolated homes and ranch buildings adjoining public land. Some other small private holdings, in particular patented mining claims, are intermixed with larger tracts of BLM ownership. Both Garnet Ghost Town and the Blackfoot River Corridor have high recreational use during the fire season and public safety is a special concern.

Important cultural resources and BLM's investments in infrastructure for recreational use in this FMU are subject to damage by wildfire. An additional area of concern is the Elevation Mountain Repeater (T13N R13W Section 28) which assists in radio communication in the majority of the Blackfoot FMU.

5. Communities at Risk and Wildland-Urban Interface

Two communities at risk, Greenough and Potomac, are included in this FMU.

6. Fire Management Objectives:

The overall fire management objective is to reduce hazardous fuels and to restore the vegetative and habitat conditions that resulted from disturbance by fire under historic fire regimes.

Vegetation Management Objectives: Desired future condition for the vegetative communities and habitats in this FMU will be identified through watershed assessments. As of fall 2004, Watershed Assessments have been completed for the Elk Creek Watershed -10,078 acres of public land, the lower Blackfoot River Corridor -11,770 acres, and for the Murray/Douglas/Yourname Watersheds 22,000 acres. Future WAs are scheduled to cover the remaining public lands in this FMU by 2012. If desired future conditions for vegetation have not been developed, the "Guidance Common to All FMUs" found earlier in this Section of the Plan will be used to guide wildfire management.

7. Fire Management Strategies:

Suppression - Suppress unplanned fires considering firefighter and public safety, cost, benefits, values to be protected, and resource objectives. Aggressive, initial attack will be used to confine or contain unplanned ignitions to smallest feasible size unless a WFSA or a Stage 1 Assessment for a Wildland Fire Implementation Plan provides for another Appropriate Management Response. MT DNRC protects all the lands in this FMU and DNRCs Missoula, Clearwater and Anaconda Units all have initial attack responsibility for portions of this FMU.

Emergency Stabilization and Rehabilitation - Refer to "Guidance Common to All FMUs". Special ESR measures may be taken in the areas of special concern for this FMU.

Wildland Fire Use - Fire, under specific conditions, is desired in the Wales Creek WSA to incrementally reduce the risk of large, stand replacement wildfire in dense and decadent stands of lodgepole pine and sub-alpine fir. A Fire Use Plan will be developed for the Wales Creek WSA to help select the Appropriate Management Response for both unplanned and planned ignitions in or near the WSA.

Prescribed Fire - Prescribed fire will be used to return to mid- to late-seral forest communities in the Douglas-fir/western larch cover types. Fire will also be used to reduce slash from timber harvest, road building and other actions that create concentrations of dead plant material. Approximately 4,6000 acres per decade will be burned under prescription in this FMU.

Mechanical Treatments – Approximately 2,200 acres of mechanical treatments will be proposed instead of or in combination with prescribed burning to meet this goal.

8. Constraints on Fire and Fuels Management

The following resource protections constraints or recommendations correspond to Management Areas (MAs) described in the RMP and are specific to the Blackfoot FMU. If a MA is not addressed below, refer to the guidance found in Section V, "Guidance Common to all Public Lands…"

MA-1: Riparian Protection Zone
MA-2: Riparian Multiple Use Zone

Blackfoot Riparian Habitat Conservation Areas
-The Blackfoot Fire Management Zone contains the Blackfoot River (which is a "Priority Watershed" under the Interium Bull Trout Conservation Strategy Implementation MOU) as well as several smaller tributaries identified by the Montana Department of Fish, Wildlife, and Parks (MDFWP) as core areas for the recovery of fluvial bull trout. Additionally, several tributaries to the Blackfoot located on BLM lands provide refugia for isolated populations of genetically pure westslope cutthroat trout. See Table 5.7 for a list of streams in the FMZ with special management recommendations.

Table 4.7 Blackfoot Fire Management Zone. Status of selected streams and special recommendations.
Streams Status: [1]Contains BLM ownership; currently occupied by bull trout
[2]Outside BLM ownership; proximal to potential BLM firefighting operations
[3]BLM ownership; non-fish bearing but mgt activities could populations immediately downstream
[4]Contain isolated and/or genetically pure populations of resident WCT
[5]Stronghold for fluvial WCT
[6]Other - see Recommendations

Stream Name	Status	Notes and Special Recommendations
Blackfoot River	1	IBTCSI Priority watershed. Provides migratory habitat for a substantial portion of fluvial bull and fluvial WCT
Gold Creek	1	State of Montana Core Area for recovery of fluvial bull trout. Follow IBTCSI S&Gs.
Belmont Creek	1,5	State of Montana Core Area for recovery of fluvial bull trout. Follow IBTCSI S&Gs.
Elk Creek	6	Ongoing, intensive stream restoration, considered to be likely site for natural re-establishment of bull trout. Impacts of suppression (esp. if heavy equipment used) likely to be more severe than effects of fire. Follow IBTCSI S&Gs. **Recommend against construction of firelines with heavy equipment. Using existing stream access or mining ponds only for pump sites. Keep heavy equipment off riparian meadows.**
Chamberlain Creek	1,2,4	Follow IBTCSI S&Gs.
Arrastra Creek	1,4	Follow IBTCSI S&Gs.
Upper Nevada Creek	1	Follow IBTCSI S&Gs.

MA -3: General Forest Management

A lodgepole pine progeny test site is located in T12N R13W Section 7 of the Elk Creek drainage. This site will be protected from wildfire. If suppression efforts are needed within this site, MIST will be used.

MA 8: Areas Recommended for Wilderness Designation

Interim Management Guidelines for WSAs restricts the use of mechanical equipment and require MIST (see Appendix 5 and 1, respectively) within the Wales Creek WSA. Earth moving heavy equipment will not be used in the WSA unless specifically authorized by the Field Manager. Because the WSA designation constrains the use of some fire suppression tactics and fuel management treatments, a site-specific Fire Use Plan will be prepared for the WSA. This plan will consider the use of both planned and unplanned ignitions to reduce fuel loading under controlled conditions and thus reduce the risk of high-intensity, wide-spread wildfire.

MA-11: Historical and Cultural Sites

There are 9 sites that have been designated as MA-11s in the Blackfoot Fire Management Zone but, most of the cultural resources were not identified as MA-11 in the RMP. These sites consist of Garnet Ghost Town, Coloma Ghost Town, Reynolds City, Reynolds City Cemetery, Sand Park Cemetery, Warren Park, Copper Cliff, Skimmerhorn and Warren's Cabin.

Proposals will be developed to reduce hazardous fuel buildups near Garnet Ghost Town and other important cultural resources may require fuel hazard reduction proposals to reduce risk to these cultural features. Fuel hazard reduction will aid in the protection of these structures during wildfire suppression efforts.

Full suppression response will be used around Garnet Ghost Town, Coloma Ghost Town, Copper Cliff, Warren's Cabin and Warren Park including building protection tactics. Existing roads will be used whenever possible. The use of earth moving heavy equipment within the site boundaries is prohibited unless specifically authorized by the Field Manager.

MIST will be used around the Reynolds City, Reynolds City Cemetery, Sand Park Cemetery, and the two sites within the Skimmerhorn area. The use of earth moving heavy equipment in these areas is prohibited.

C. **Fire Management Unit Name:** Clark Fork Front
Category/Number: B2

1. Location

This FMU lies east of Missoula and includes approximately 248,500 acres (9 percent public land administered by BLM, 8 percent state, 83 percent private, 1 percent USFS). US Interstate 90 is the primary highway access. Numerous roads of various classes from past and present mining and logging activities provide access to the public and adjacent private and state lands. Most BLM land is not contiguous

2. Characteristics

The BLM lands are mostly steep forested slopes with scattered open grasslands and small inclusions of riparian and aquatic habitats. Conifers provide the dominant vegetation cover over about 80 percent of the area and the most common conifer species are ponderosa pine, western larch, and Douglas-fir. The remainder of the area is mostly open grassland and about 1 percent is aquatic or riparian habitat.

The area contains several Historic Mining Districts, a wide range of cultural resources, habitat for some threatened, endangered, or sensitive wildlife species such as bald eagles, and the Rattler Gulch ACEC.

3. Wildland Fire History

Lightning is the predominate cause of unplanned wildfires in the FMU. Between 1980 and 2003 the following fires and burned acres were reported.

	Number of Fires	Acres Burned
Lightning	21	16
Human	7	54

Fire season can start as early as mid-April in the lower elevations and last until mid-October. The occurrence of spring rains, in May and June typically dictate the severity of the summer fire season. The FMU supports a number of fuel complexes, including grass, ponderosa pine and mixed-conifer.

4. Values at Risk/Resource Protection Constraints

Individual homes and ranch headquarters adjoin BLM land. The Bearmouth Chalet and campground is also close to BLM land. Private homes on small tracts are common throughout the Ten Mile, Cramer Creek, and Bear Creek drainages.

Much of the private land adjoining BLM lands is owned by corporations or partnerships which manage these lands primarily for timber production.

5. Communities at Risk

None

6. Fire Management Objectives

The overall fire management objective is to use prescribed fire and surrogate fire treatments to restore and maintain healthy forests and rangelands. Sites now rated as FRCC III and II would be moved toward FRCC I.

While fire is generally desirable and prescribed fire is needed to set back juniper and Douglas-fir encroachment onto the sagebrush-grass areas, fire use and management is constrained by the relatively small tracts of BLM lands, the strong wildfire suppression objectives of adjacent landowners and the topography which limits physical access and firefighting tactics.

Vegetation Management Objectives: Desired future condition for the vegetative communities and habitats in this FMU will be identified through a future watershed assessment which is scheduled for completion by 2010. Until the watershed assessment is completed, the "Guidance Common to All FMU's" found earlier in this Section of the Plan will be used to guide BLM's response to unplanned ignitions.

7. Fire Management Strategies

Suppression: Suppress unplanned fires considering firefighter and public safety, cost, benefits, values to be protected, and resource objectives. Confine or contain unplanned ignitions to smallest feasible size unless a site specific fire management plan denotes other actions are allowable. The Montana DNRC protects all the BLM lands in the Clark Fork Face FMU with the exception of approximately 600 acres which lie south of the Clark Fork River and east of the Beavertail Interchange on I-90. These lands are; approximately 200 acres in T11N, R17W, Section 2, only that portion SW of the River; 240 acres in T11N, R16W, Section 8; 160 acres in T11N, R15W, Section 18.

Wildland Fire Use: Wildland Fire Use for Resource Benefits is not planned for this FMU.

Prescribed Fire: Prescribed fire may be used to reduce dense small diameter class stands of Douglas-fir and encourage the establishment of more fire tolerant ponderosa pine communities. Prescribed fire may also be used to reduce fuels in the aftermath of forest treatments such as timber harvesting or thinning. Approximately 1,900 acres per decade will be treated using prescribed fire.

Non-fire Treatments: Mechanical methods may be used to manage fuels where current fuel loading needs to be reduced prior to or instead of prescribed burning and may be used near sensitive sites such as Rattler Gulch ACEC to reduce risk of catastrophic wildfire in these special areas. Approximately 900 acres of mechanical treatments will be used per decade in this FMU.

Emergency Stabilization and Rehabilitation: Refer to "Guidance Common to All FMUs". Special ESR measures may be taken in the areas of special concern for this FMU.

8. Constraints on Fire and Fuels Management

The following resource protections constraints or recommendations correspond to Management Areas (MA's) described in the RMP and are specific to the Clark Fork Front FMU. If a MA is not addressed below, refer to the guidance found in Section V, "Guidance Common to all Public Lands…"

MA-1: Riparian Protection Zone
MA-2: Riparian Multiple Use Zone

Clark Fork Front Riparian Habitat Conservation Areas
-The Clark Fork Front Fire Management Zone includes mainstem Clark Fork River as well as the mouth of the Blackfoot River, and at least one small tributary (Johnson Gulch) containing bull trout. Application of IBTCSI Standards and Guidelines should be sufficient in this area to protect aquatic resources and habitat.

Table 5.7 Clark Fork Front Fire Management Zone. Status of selected streams and special recommendations.

Streams Status: [1]Contains BLM ownership; currently occupied by bull trout
[2]Outside BLM ownership; proximal to potential BLM firefighting operations
[3]BLM ownership; non-fish bearing but mgt activities could populations immediately downstream
[4]Contain isolated and/or genetically pure populations of resident WCT
[5]Stronghold for fluvial WCT
[6]Other - see Recommendations

Stream Name	Status	Special Recommendations
Lower Blackfoot R.	1	Follow IBTCSI S&Gs.
Johnson Gulch	2	Aerial operations over BLM lands on the Lower Blackfoot should include measures to avoid impacts to Johnson Gulch (i.e., release of retardant in channel).
Clark Fork River	1	Follow IBTCSI S&Gs.

MA-9: Special Management Areas

According to the Rattler Gulch ACEC Management Plan mechanized ground disturbing activities will not be used in connection with fire suppression.

MA-11: Historical and Cultural Sites

There are at least 7 sites that have been designated as MA-11s in the Clark Fork Front FMU. These sites consist of Beartown, Bearmouth, and Ravenna sub-station, portions of Deep Creek, an area around Sleepy Tom and some areas in Tenmile. Most of the cultural resources in the Clark Fork Front FMZ have not been designated as MA-11.

MIST will be used around Beartown, Bearmouth, Ravenna sub-station, and the area in Sleepy Tom. The use of earth moving heavy equipment in these areas is prohibited.

Fire will not destroy the sites within Deep Creek or the sites in Tenmile therefore fire may be allowed to burn over these areas. The use of earth moving heavy equipment in these areas is prohibited.

D. Fire Management Unit Name: Flintrock
Category/Number: B3

1. Location

The area includes approximately 664,00 acres (4 percent public land administered by BLM, 2 percent state, 63 percent private, 31 percent FS). Montana State Route 1 is the primary highway used to access the majority of this area. Numerous roads of various classes from past and present mining and logging activities provide administrative and emergency access to BLM land. Most BLM land is adjacent to other federal land administered by the Beaverhead-Deerlodge National Forest. The area contains several Historic Mining Districts, a wide range of cultural resources, habitat for some threatened, endangered, or sensitive wildlife species such as bald eagles, Squaw Rock ACEC and Quigg West WSA.

2. Characteristics

Topography ranges from steep, rocky slopes to rolling uplands with some gently sloping lowlands. Vegetation cover on BLM lands is predominately lodgepole pine and Douglas-fir. Some south facing slopes are covered primarily by sagebrush/grass or bunchgrass communities. Approximately 20 percent of the area contains decadent stands of lodgepole pine.

3. Wildland Fire History

Lightning is the predominate cause of unplanned wildfires in the FMU. Between 1980 and 2003 the following fires and burned acres were reported.

	Number of Fires	Acres Burned
Lightning	6	1.1
Human	2	0.2

Fire season can start as early as mid-April in the lower elevations and last until mid-October. The occurrence of spring rains, in May and June typically dictate the severity of the summer fire season. The FMU supports a number of fuel complexes, including grass, ponderosa pine and mixed-conifer.

4. Values at Risk/Resource Protection Constraints

The communities of Philipsburg and Maxville and the surrounding subdivisions are located within close proximity of BLM lands. Numerous isolated private homes and ranch headquarters adjoin BLM land and many of these are found in the lower Scotchman and Willow Creek drainages. For the past five or more years there has been a upswing in the construction of new housing and other structures on tracts of private lands which where formerly in agricultural use.

5. Communities at Risk

Philipsburg and Maxville both in Granite County

6. Fire Management Objectives

While fire has played an important role in the function of the ecosystems in this FMU, unplanned ignitions could cause negative effects. Prescribed fire is needed and will be used to control Douglas-fir and juniper encroachment onto sagebrush-grass areas and to reduce fuels in the aftermath of forest treatments.

Fire, under specific conditions, may be desired within the Quigg West WSA

Vegetation Management Objectives: Desired future condition for the vegetative communities and habitats in this FMU have been identified in the Flint Creed Watershed Assessment and will be used to help develop BLMs response to unplanned ignitions. The Rock Creek WA is scheduled for completion by 2010 and until that WA is completed the "Guidance Common to All FMUs" found earlier in this Section of the Plan will be used to guide BLMs response to unplanned ignitions.

7. Fire Management Strategies.

Suppression - Suppress unplanned fires considering firefighter and public safety, cost, benefits, values to be protected, and resource objectives. Confine or contain unplanned ignitions to smallest feasible size unless a site specific fire management plan denotes other actions are allowable.

Quigg West WSA limits use of mechanical equipment and requires "light-on-the-land" techniques or MIST. Use of heavy equipment is prohibited in the WSA unless specifically authorized by the Field Manager.

Wildland Fire Use – Wildland Fire Use for Resource Benefits is not planned for this FMU with the exception of the Quigg West WSA. The USFS is expected to write a fire use plan for the 60,500 acres under FS jurisdiction in the "Quigg" Rare II Area. The MiFO would work with FS on that fire use plan to include the BLM lands in the 520 acre Quigg West WSA.

Prescribed Fire: Prescribed fire may be used to reduce Douglas-fir encroachment into sagebrush parks, reduce overstocking of Douglas-fir within the conifer stands by removing a portion of the understory trees with fire and encourage aspen rejuvenation within old-aged stands.

Non-fire treatments: Approximately 900 acres per decade will be mechanically treated prior to or instead of prescribed burning and around sensitive sites such as Squaw Rock ACEC to reduce risk of catastrophic wildfire in these special areas.

Emergency Stabilization and Rehabilitation - Refer to "Guidance Common to All FMUs". Special ESR measures may be taken in the areas of special concern for this FMU.

8. Constraints on Fire and Fuels Management

The following resource protections constraints or recommendations correspond to Management Areas (MA's) described in the RMP and are specific to the Flintrock FMU. If a MA is not addressed below, refer to the guidance found in Section ??, "Guidance Common to all Public Lands…".

MA-1 and 2: Riparian Protection Zone& Riparian Multiple Use Zone

FlintRock Front Riparian Habitat Conservation Areas

The FlintRock Fire Management Zone includes the mainstem of the Clark Fork River as well as the Rock Creek and Flint Creek sub basins. BLM ownership is primarily in the upper Flint and Rock Creek sub basins. Additional information and recommendations are pending completion of the Flint Creek Watershed Analysis (summer of 2002).

Table 6.7 FlintRock Fire Management Zone. Status of selected streams and special recommendations.
Streams Status:[1]Contains BLM ownership; currently occupied by bull trout
[2]Outside BLM ownership; proximal to potential BLM firefighting operations
[3]BLM ownership; non-fish bearing but mgt activities could populations immediately downstream
[4]Contain isolated and/or genetically pure populations of resident WCT
[5]Stronghold for fluvial WCT
[6]Other - see Recommendations

Stream Name	Status	Special Recommendations
Clark Fork R.	6	Contains bull trout; distant from BLM ownership
Rock Cr	1,4,5	LWD levels are relatively low. Stream is temperature-limited. **Suppress fire in order to protect shading and cool water sources. Following fire, leave all down wood and snags in riparian areas and floodplains. Avoid use of heavy equipment or construction of new roads in upper watershed due to high levels of sandy granitic geology. Follow IBTCSI S&Gs.**
Upper Willow Cr	1,4	U. Willow Cr. contains greatest amount of sensitive soils in sub-basin. Water diversions substantially reduce summer low flows. Water quality severely impacted (high temperatures, sediment). Contains severely depressed population of bull trout isolated from elsewhere in the watershed due to thermal and physical barriers. **Do not draw water from U. Willow Creek for fire suppression. Due to sensitive soils, strictly avoid use of heavy equipment within U. Willow RCHA or in adjacent tributaries.**
Flint Cr	1	Follow IBTCSI S&Gs. More recommendations pending completion of Flint Cr WA
N Fk Flint Cr	1	Follow IBTCSI S&Gs More recommendations pending completion of Flint Cr WA
Fred Burr Cr	1	Follow IBTCSI S&Gs. More recommendations pending completion of Flint Cr WA
Boulder Cr	1	Follow IBTCSI S&Gs. More recommendations pending completion of Flint Cr WA

MA-8: Areas Recommended for Wilderness Designation

Interim Management Guidelines for WSAs will limit the use of mechanical equipment and require MIST (see Appendix 4 and 1, respectively) within the Quigg West WSA. Earth moving heavy equipment use will not be permitted unless specifically authorized by the Field Manager. Because the WSA designation constrains the use of some fire suppression tactics and fuel management treatments, a site-specific fire use management plan will be prepared for the WSA. This plan will consider the use of both prescribed fire and Wildfire Managing for Resource Objectives (WFMRO) to reduce fuel loading and thus reduce the risk of high-intensity, wide-spread wildfire.

MA-9: Special Management Areas

Squaw Rock ACEC is within, and is subject to the constraints listed in Section 4.1 Wildfire in Management Areas for wildfire suppression and rehabilitation.

MA-11: Historical and Cultural Sites

There are at least 3 sites that have been designated as MA-11s in the FlintRock FMZ. These sites consist of areas north of Philipsburg and an area near Rock Creek. Most of the cultural resources in the FlintRock FMZ have been designated as Ma-11s. The resource area Archaeologist will be consulted for further information.

Fire will not destroy these sites and may be allowed to burn over them. The use of earth moving heavy equipment in these areas is prohibited.

E. Fire Management Unit Name: Hoodoo
Category/Number: C4

1. Location

The FMU lies about 50 miles east of Missoula. It contains 433,000 acres (7 percent are public lands administered by BLM, 82 percent private, 7 percent state and 4 percent Forest Service). The majority of the land managed by the BLM within this area is contiguous. The area contains several Historic Mining Districts, a wide range of cultural resources, habitat for several threatened, endangered, or sensitive wildlife species such as bald eagles and lynx.

2. Characteristics

The area exhibits a broad range of topography from rolling sagebrush/grass parks, to high forested plateaus with some open parks to steep, forested slopes. Montana State Route 141 is the primary highway used to access the majority of this area. The FMU has numerous roads of various classes from past and present mining and logging that provide administrative and emergency access to the BLM lands.

The forest vegetative cover is predominately lodgepole pine (70 percent) and Douglas-fir (30 percent) forest types. Scattered stands of aspen are also present. Some sagebrush/grass areas occur at the lower elevations and at higher elevations on southwest aspects and on plateaus.

3. Wildland Fire History

Lightning is the predominate cause of unplanned wildfires in the FMU. Between 1980 and 2003 the following fires and burned acres were reported.

	Number of Fires	Acres Burned
Lightning	10	2.9
Human	3	6.2

Fire season can start as early as mid-April in the lower elevations and last until mid-October. The occurrence of spring rains, in May and June typically dictate the severity of the summer fire season. The FMU supports a number of fuel complexes, including grass, sage, and mixed-conifer.

4. Values at Risk/Resource Protection Constraints

Interface consists of individual homes and ranch headquarters on adjoining land. Some private homeowners live in the Blackfoot City area. These interface areas will be an important factor in determining the appropriate management response to unplanned ignitions.

5. Communities at Risk

None

6. Fire Management Objectives

Where necessary, reduce fuels in the WUI. This will mitigate the potential adverse effects from wildfire on the Blackfoot City Ghost Town and where individual homes or ranch buildings and improvements could be threatened by wildfire.

Fire, under specific conditions, is desired in the Hoodoos WSA to reduce fuel loads in decadent stands of lodgepole pine. A site specific fire use plan will be developed for the Hoodoos WSA to guide suppression of wildfire, fire use, and prescribed fire within the WSA.

Vegetation Management Objectives. The 'Hoodoos' Water Assessment will be completed in 2005 and covers the majority of the BLM lands in this FMU. This Watershed Assessment will establish the desired future conditions for vegetation in this portion of the FMU. If desired future conditions have not been written for a tract, the general guidelines or the guidelines given for each MA will be used to develop the appropriate management response and fire suppression tactics.

7. Fire Management Strategies

Suppression - Suppress unplanned fires considering firefighter and public safety, cost, benefits, values to be protected, and resource objectives. Confine or contain unplanned ignitions to smallest feasible size unless a site specific fire management plan denotes other actions are allowable. MT DNRC's SW Land Office protects all BLM lands in this FMU.

The Hoodoo WSA limits use of mechanical equipment and requires "light-on-the-land" techniques or MIST. Heavy equipment use is not allowed unless authorized by the Field Manager. Because the WSA constrains the use of some fire suppression tactics and fuel management treatments, a site-specific fire management plan will be prepared for the WSA.

Wildland Fire Use - Wildland Fire Use for Resource benefits is not planned for this FMU with the possible exception of the Hoodoo WSA. A site-specific fire management plan will be prepared for the WSA.

Prescribed fire may be used to open up dense lodgepole pine stands, promote growth of ponderosa pine by reducing the current overstocking of Douglas-fir on these sites, and to revitalize old-aged stands of aspen. Prescribed fire will also be used to reduce fuels in the aftermath of forest treatments. Approximately 2,500 acres per decade will be burned under prescription.

Non-fire treatments -Fuel hazard reduction projects around sensitive sites such as Blackfoot City Ghost Town and in the wildland urban interface to reduce risk of catastrophic wildfire in this area.

Emergency Stabilization and Rehabilitation - Refer to "Guidance Common to All FMUs". Special ESR measures may be taken in the areas of special concern for this FMU.

8. Constraints on Fire and Fuels Management

The following resource protections constraints or recommendations correspond to Management Areas (MA's) described in the RMP and are specific to the Flintrock FMU. If a MA is not addressed below, refer to the guidance found in "Guidance Common to all FMUs".

MA-1: Riparian Protection Zone
MA-2: Riparian Multiple Use Zone

Hoodoos Front Riparian Habitat Conservation Areas
This Fire Management Zone contains several streams (i.e., Braziel, Gallagher, and Wet Cottonwood Creeks) where upper reaches on BLM providing relatively intact habitat and refugia for native trout from severely degraded downstream sections on private land. It is likely that Gallagher Creek contains an isolated population of genetically pure WCT. Fire suppression in these RHCAs should provide for protection of water quality.

Table 7.7 Hoodoos Fire Management Zone. Status of selected streams and special recommendations.
Streams Status: [1]Contains BLM ownership; currently occupied by bull trout
[2]Outside BLM ownership; proximal to potential BLM firefighting operations
[3]BLM ownership; non-fish bearing but mgt activities could populations immediately downstream
[4]Contain isolated and/or genetically pure populations of resident WCT
[5]Stronghold for fluvial WCT
[6]Other - see Recommendations

Stream Name	Status	Notes and Special Recommendations
Clark Fork River	1	Apply IBTCSI S&Gs
Dog Creek	1	Adjoins Helena NF. Coordinate closely with Helena NF fishery staff during fire suppression. Apply IBTCSI S&Gs.
Gallagher Creek	4(?)	Provides intact refugia upstream from degraded section of channel on private ownership. Contains few if any roads. **Allow natural fire processes to avoid use of heavy equipment or introduction of new roads or fire lines.**
Wet Cottonwood Cr	4(?)	Provides intact refugia upstream from degraded section of channel on private ownership. Apply IBTCSI S&Gs

MA-11: Historical and Cultural Sites
There are at least 3 sites that have been designated as MA-11s in the Hoodoos FMZ. These sites consist of Blackfoot City, Blackfoot City Cemetery Annex and an area northeast of Avon, Montana. Most of the cultural resources in the Hoodoos FMZ have not been designated as MA-11.

MIST will be used around the Blackfoot City Cemetery. The use of earth moving heavy equipment in these areas is prohibited.

Fire will not destroy Blackfoot City and the area northeast of the town of Avon. Therefore, fire may be allowed to burn over these areas. The use of earth moving heavy equipment within these areas is prohibited.

V. WILDLAND FIRE MANAGEMENT PROGRAM COMPONENTS

A. Wildland Fire Suppression

The FMP is based on the concept that all wildland fires will be subject to an initial response.

Fire History

Between 1980 and 2003 the Field Office experienced 137 fires, of these approximately 85 percent of fires in this field office where lightning caused and generally occur between the months of June and August. Human caused fires are usually associated with debris burning in the spring and hunting season in the fall.

The annual average for all fire causes is 5.7 fires per year burning an average of 63 acres per year.

Multiple fire days consisting of 2 fires or more per day have occurred 17 times with 3 or more fires occurring on ten days. Multiple occurrence days account for 37 percent of the fires on the Missoula Field Office.

The number of fires varies from year to year and is dependent on the amount of moisture associated with the annual snow pack and late spring rains. The size of fires fluctuates from year to year depending on the availability of the primary fire carrier. Perennial grasses and timber litter are the primary fire carriers across most of the elevation gradients.

Fire occurrence is most common in the Blackfoot FMU. The probability of large fires (based on historical data) is also highest. The majority of this field office experiences primarily Class A and B fires. The Field Office has experienced 1 Class F fire between 1980 and 2003.

Mobilization of a Type II Incident Management Team has occurred one time during this time period for fires on the Missoula Field Office. The Field Office has been involved in multi-jurisdictional large fire management as well.

Fire Behavior

The Field Office supports a variety of fuel types, including grass, sage, sage/grass, ponderosa pine, Douglas-fir, lodgepole pine, and mixed-conifer.

The following table represents best available information on fuels complexes within the Field Office and expected fire behavior during the fire season.

Fuel Model	Rate of Spread, ch/hr	Flame Lengths, ft.	Fire Characteristics
Ponderosa Pine (Timber/Litter and Grass Fuel Group)			
9	7 – 25	2.0 – 5.3	Surface fires only; potential for independent crown fire at high wind-speeds
Grasslands/Sagebrush (Grass Fuel Group)			
1	0 – 311	0 – 8.4	Fires burn out quickly
2	0 – 103	0 – 11	Continuous and rapid spread under high wind conditions
Douglas-fir, Lodgepole Pine & Mixed Conifer (Timber/Litter Fuel Group)			
8	0-2	.5-1.0	Surface fire only; only under severe weather do they pose a problem
Douglas-fir, Lodgepole Pine & Mixed Conifer (Timber/Litter Fuel Group)			
0	8-30	8-15	Fires burn in the surface and ground fuels with greater intensities than models; high potential for crown fire.

Suppression and Preparedness Actions

Since fire suppression is not a responsibility of the Missoula Field Office the agencies providing protection will use the following as their guidance for fire suppression. Use AMR to suppress all fires in accordance with management objectives for the FMU based on current conditions and fire location. An appropriate response could vary from limiting a fire to the smallest size possible to monitoring based upon safety concerns.

The priority for a quick suppression response for the Field Office is to prevent wildland fires from spreading into the urban interface, onto private land, and improvements on BLM lands. For any type of response, minimizing cost must be considered.

Requirements for fire operations can be found in the Interagency Standards for Fire and Aviation Operations.

The Field Office does not have a Fire Danger Operating Plan it relies on the plans of the agencies providing fire protection.

Prevention

Under the terms of the exchange of fire protection responsibilities between the BLM Montana State Office and the Northern Region of the Forest Service fire prevention services were to be provided by the protecting agency. At the time of the development of this document it is being determined whether or not fire prevention is still a service to be provided. Until that determination is provided fire prevention activities are being performed jointly with the protecting agencies.

The full spectrum of the fire prevention program will be determined as part of the RAMS assessment being conducted for the Field Office. Following the completion of this assessment a Field Office fire prevention plan will be developed in conjunction with the Lolo Forest and DNRC's SW Land Office.

Special Orders and Closures

The Field Office manager or delegated acting's have authority to issue restrictions. Fire restrictions and closures are normally put into place after conferring with other agencies within the SW Zone of NRCG. Generally, restrictions are instituted during times of high fire danger, occurrence or both, and in time of drawdown of fire personnel due to high fire activity in the area (Region). Small area closures needed to prevent the general public from entering areas where fire suppression operations are taking place will be agreed to by the jurisdictional and protection agencies and the Incident Commander if a Type I or II IC Team is in place. Large area closures will be discussed by the SW Zone committee, agreed to by the agency administrators and, in BLMs case, approved by the Montana State Director. All restrictions will use the language specified in the NRCG Restrictions and Closures Plan.

Fire Training

Training and fitness requirements for all personal involved in fire/suppression support can be found in the Interagency Standards for Fire and Aviation Operations. Attendance at the refresher training along with successful competition on the appropriate level of work capacity testing is a prerequisite for the issuance of a red card prior to May 1 annually.

Training files for all red carded personnel are held by the Fire Management Officer. The Western Zone Red Card Committee is responsible for issuance of position task books as well as certification of task books and qualifications. Specific guidance for the red card committee is in the Interagency Standards for Fire and Aviation Operations and the Montana BLM Western Fire Zone Fire Qualification Review and Certification Committee Operating Plan.

Detection

Detection of fires within the MiFO is generally dependent upon reports from other agencies lookouts, Field Office employees and the public. Post-high lightning activity patrols in high probability areas within the Field Office are routinely conducted on the ground, with some fire detection flights at dry times of the year, both these types of patrols are performed by the protecting agencies.

Fire Weather and Fire Danger

The Field Office has one permanent weather station (Stinkwater) and relies on its interagency partners for RAWS data. The Field Office is scheduled to have one portable RAWS station beginning in the fall of 2004 for zone prescribed fire operations. NFDRS fire danger determinations are the responsibility of the protecting agencies.

Aviation Management

The Fire Management Officer (FMO) has been designated as the Unit Aviation Officer. All flight involving Field Office employees need to be coordinated through the FMO. Local vendors are available and are ordered through Missoula Dispatch.

The unit aviation plan can be found in Appendix B.

Initial Attack

All fires within the Field Office will be managed with suppression actions consistent with preplanned dispatch protocols in conformance with resource management objectives identified in this plan. Tactics and strategies will be based on the current and predicted weather and fire behavior. Firefighter and public safety is always the first priority. Use the following information for determining initial attack priorities.

While the Category B FMUs will generally have a higher priority for suppression than the Category C FMUs, risk and threat to public and private resources will be evaluated on a fire by fire basis when suppression resources are too limited to meet the demand

Extended Attack

ICS provides for a management/organizational structure on incidents that evolve in complexity or increase in size, whether within a few hours or over several days. While the criteria for incident complexity vary by local conditions, a fire that has escaped initial attack and is considered in extended attack when:

a. Has not been contained by the initial attack resources dispatched to the fire.
b. Will not have been contained within the management objectives established for the FMU.
c. Has not been contained within the first operational period and there is no estimate of containment or control.

When complexity levels exceed initial attack capabilities, the appropriate Incident Command System (ICS) positions should be added commensurate with the complexity of the incident. The Incident Complexity Analysis and the Wildland Fire Situation Analysis (WFSA) will assist in determining the appropriate management structure to provide for safe and efficient fire suppression operations.

The protecting agency and the BLM will jointly participate in development of the WFSA and delegation of authority for fires on BLM land. BLM and the protecting agency will provide information relevant to the initial stages of the WFSA and provide the situational briefing for the incoming management organization. If other jurisdictions are involved all affected Line Officers or their designees will sign the delegation of authority and a Unified Command will be established to deal with the incident.

Delegations of Authority will clearly spell out Line Officer expectations and roles and responsibilities for the incoming Incident Commander as identified in the WFSA including cost containment measures.

B. Wildland Fire Use

No Wildland Fire Use Plans have been written for MiFO lands. Two of the WSAs in the MiFO, Wales Creek and Hoodoos are candidates for Fire Use Plans that would consider management of both planned and unplanned ignition to reduce fuels and for resource benefit.

C. Prescribed Fire

The Missoula Field Office prescribed fire program is an interdisciplinary activity with a basis to treat natural and activity fuel accumulations to meet resource objectives, standards, and guidelines as outlined in the Garnet RMP, the Fire/Fuels Management Plan and Environmental Assessment which amended the RMP, and area specific planning documents. These documents permit the use of management ignited fire on BLM lands in the Missoula Field Office. Prescribed fire has been and will continue to be used to reduce hazardous fuels, improve wildlife habitat and forage production.

Field reconnaissance and interdisciplinary analysis of prescribed fire projects is completed one to two years in advance of project implementation. The Field Office develops out-year budget proposals and burn plans in accordance with RMPs and project level EAs. Projects will be identified in the Risk Assessment Mitigation Strategy (RAMS).

Prescribed burning will prioritized as follows:

1. Fuel reduction in the Wildland/Urban Interface.
2. Restoration of forest and rangeland health –return areas that are currently in FRCC 2 and 3 to condition class 1.
3. Maintain areas that are currently in condition class 1.

The 1998 BLM Handbook 9214 "Prescribed Fire Manual" provides specific guidance for the prescribed fire program. It covers guidance, planning, prescribed fire plan requirements, determination complexity, safety and qualifications, project finance, cooperation and assistance, escape fires, and reporting.

The Field Office fire program maintains hand held ignition torches (drip torches) and borrows other equipment from other field offices, e.g. the Butte FO has both a plastic sphere dispenser and a Type 6 Engine that is available to support prescribed burning. Helitorches and other specialized equipment are ordered from Forest Service or other agencies or through the Missoula Dispatch Center.

Only Qualified personnel will participate in the implementation of prescribed fire and fuels implementation projects. A list of qualified personnel is available from the FMO. Missoula Interagency Dispatch will support prescribed burning by ordering the necessary resources, making notifications, monitoring and coordinating burn day activities, ordering any contingency forces that might be needed, etc.

All prescribed fire treatments are monitored to determine if treatments are meeting the objectives as outlined in the project plan. Prescribed fire treatment monitoring can be defined as a systematic process for collecting and recording information to provide a basis for evaluating, adjusting resource and treatment objectives, methods, and implementation practices. Monitoring and evaluation will follow the guidance stated in the "Prescribed Fire Manual" 9214 (pg.19), RMPs, area-specific planning documents, and project burn plans.

Smoke Management/ Air Quality

In 1978, federal, state and local government agencies and the forest products industry formed the Montana State Airshed Group. Their purpose was to manage and limit the impacts of smoke generated from necessary prescribed burning. In 1990, agencies and companies in North Idaho joined the Montana group on an operational basis to accomplish the same purposes. South Idaho agencies and companies joined the group in 1999.

Accumulation of smoke from controlled burning is limited through scientific monitoring of weather conditions and formal coordination of burns. Members submit a list of planned burns to the Monitoring Unit in Missoula, Montana. For each planned burn, information is provided describing the type of burn to be conducted, the number of acres, as well as the location and elevation at each site. Burns are reported by "Airshed" which are geographical areas with similar topography and weather patterns. The program coordinator and a meteorologist provide timely restriction messages for airsheds with planned burning. Weather balloons may be launched and tracked to identify specific atmospheric conditions to aid in decision-making. The Missoula Monitoring Unit issues daily decisions which can restrict burning when atmospheric conditions are not conducive to good smoke dispersion. Restrictions may be directed by airshed, elevation or by special impact zones around populated areas. The Monitoring Unit announces burning restrictions through 17 airshed coordinators located throughout Idaho and Montana.

The MiFO has land in the following air sheds: 3A, 3B and 5. The Field Office boundary includes one Impact Zone around Missoula and one non-attainment areas in and around the town of Missoula.

Implementation of the RAZU Online Burn Reporting System began in spring of 2002. Pre-season burn lists will be entered by individual burners, giving the responsibility for submitting and proposing daily burns back to the members.

It is the responsibility of the Airshed coordinator to be the first point of contact between the members and the Monitoring Unit regarding operational smoke issues, reporting problems, or in a crisis situation such as a smoke intrusion. The coordinator will also provide assistance to burners by entering burns in the event of system problems, providing training in using the new online program, and being the point of contact for smoke related concerns.

D. Non-Fire Fuel Applications

Non-fire fuels treatments comprise a large portion of the fuels management program in the Field Office because it is often not practical to use fire alone where fuel loading is high and fire can burn with great intensity. The majority of the public lands have are a forested cover type which have fairly long fire return intervals and relatively high fire intensity. Therefore, the risk of using fire alone to reduce fuels in these habitats is high: Escaped fire could badly damage homes and improvements on private lands in the urban interface and greatly reduce the value of trees and habitats on private and public lands. Wildland urban interface communities on the Federal Register have received priority planning and treatment. Future projects will usually be identified in the Risk Assessment Mitigation Strategy (RAMS). Project planning and treatment objectives are in accordance with RMPs and area-specific planning documents.

The development of treatment proposals is typically accomplished one to three years in advance of planned treatments. Field reconnaissance and interdisciplinary analysis are completed one to two years in advance of project implementation.

All specific non-fire fuels treatment project plans include pre/post project criteria or silvicultural prescriptions. For specific action items refer to area-specific planning documents and individual project plans.

Implementation of non-fire fuels projects is generally accomplished through service contracts, force account labor (Fuels Crew), and labor provided under various IGO with Forest Service.

The fuels program will monitor to determine if treatments are meeting project objectives. Monitoring for non-fire fuels treatments is based on site specific planning documents, project objectives, and silvicultural prescriptions. Monitoring will ideally provide a basis for adjusting future management decisions, and can provide information for education and public meetings in WUI areas.

Project level reporting requirements have been established and include submissions in National Fire Plan Operations Reporting System (NFPORS) and the Management Information System (MIS). Resource specialists associated with fuels projects report in the Rangeland Improvement Project System (RIPS) and the Budget Planning System (BPS).

Service contracts require documentation as specified by the Montana BLM state office or the National Business Center. The Contracting Officer Representative maintains a service contract folder that is associated with a project folder.

Documentation requirements including maps, agreements, monitoring, and project notes are compiled in project folders. The folders are maintained in hard copy formats, and in electronic formats. The BLM Prescribed Fire Management Handbook 9214 specifies project file documentation requirements for fuels treatment projects.

E. Emergency Rehabilitation and Restoration

The Field Office does not have a Normal Fire Rehabilitation Plan. If emergency rehabilitation or restoration is needed, an interdisciplinary-burned area rehabilitation team will be formed and the Montana BLM Burned Area Emergency Rehabilitation (BAER) team will utilized as needed to develop plans and any support (E.G. NEPA) documents.

F. Community Protection/Community Assistance

One of the five key points of the National Fire Plan, the Community Assistance program is based on cooperation and communication among federal agencies, states, local governments, tribes and interested parties. The program strives to build capacity to develop and implement citizen-driven solutions that will lessen local vulnerability to the risks of wildland fires. Specific objectives of the program include: 1) promotion of community assistance for planning, mitigation and education; 2) hazardous fuels reduction activities, training and maintenance; and 3) enhancement of local and small business employment opportunities for rural areas.

Community Assistance funds are utilized by communities for fire planning, fuels reduction projects and educational workshops. The first step for communities is to develop a community wildfire protection plan (CWPP), assessing their risks, hazards, values and protection preparedness. The CWPP must also contain mitigation strategies, based on the findings of the assessment. Components of the CWPP meet requirements established by the National Fire Plan and the Healthy Forests Restoration Act; plans are also encouraged to meet the FEMA Pre-Disaster Mitigation planning process, allowing communities to apply for all-risk mitigation grants.

The hazardous fuel reduction aspect focuses on the wildland-urban interface areas, reducing the risk to people and privately owned property. Fuels projects include both wildland fuels reduction (by chemical, mechanical, biological and prescribed fire means) and structural landscape fuel modification (promoting Firewise landscaping and structures and creating defensible/survivable space).

The education component includes the development and implementation of wildfire education, training and community action/involvement programs. Education may also focus on the planning and adopting of zoning regulations and ordinances to advance wildfire safety in the urban interface. A major educational strategy involves the use of the Firewise workshop for communities, where workshop activities promote combustible vegetation management, structural ignition prevention and defensible/survivable space.

Benefits of the Community Assistance program are tri-fold. The program serves to reduce the risk and consequences of wildland fire, expand capacity for local communities to help themselves and enhance the economic stability of rural communities.

All counties in the Missoula Field Office (Missoula, Powell and Granite) have been funded through the Community Assistance program to write county-wide CWPPs. An Agreement with Headwaters RC&D covers Granite and Powell Counties. A separate agreement covers Missoula County. An agreement with Northwest Regional RC&D covers Sanders County (no BLM land but assisted them in writing the fire chapter of PDM). Missoula County has received additional funding to host educational workshops. Upon completion of the CWPP planning process, all counties will require future program funding to complete fuels hazard reduction projects and educational events, as identified by the CWPP analysis process.

Rural Fire Assistance Program

The Rural Fire Assistance (RFA) and Volunteer Fire Assistance (VFA) programs provide federal funding, administered through the State Forester, to assist rural and volunteer fire departments. RFA provides funding to enhance firefighter safety and strengthen the wildland fire protection capabilities of rural fire departments that provide support on federal ground. The RFA program offers assistance with training, equipment and prevention efforts.

The VFA program provides funding to volunteer fire departments for training, firefighting equipment and organization of new departments.

The RFA/VFA programs are designed to help departments meet and/or exceed accepted standards of fire qualifications, training and performance; thus, increasing firefighter safety.

Predictions for future RFA funds include a 50 percent reduction in the next year and the complete phasing out of the program by the following year.

VI. BUDGET AND ORGANIZATION

A. Budget and Organization

The table below is the organization and equipment required to meet 100 percent of program objectives.

Bureau of Land Management Implemented Fire Resources
Office: Missoula Field Office

Resources	Quantity	Number of Personnel	Total Work Months
Number of Engines:	0		
Number of Water tenders:	0		
Number of Dozers:	0		
Number of Tractors / plows:	0		
Number of Fire Boats:	0		
Number of Type 1 Crews:	0		
Number of Helitack Crews:	0		
Number of Fuels Crews:	0		
Number of Type 2 Crews sponsored:	0		
Number of Smokejumpers (AK & NIFC only):	0		
Number of Fire Management Officers:	0		
Number of Assistant FMOs / FCOs:	0		
Number of Fire Operations Specialists:	0		
Number of Dispatchers:	0		
Number of Other Aviation Staff (Aviation Mgr., Seat Mgr, etc.):	0		
Number of Mitigation/Education/Prevention Specialists / Techs:	0		
Number of Resource Specialists:	5		20
Number of Fuels Specialists:	2		12
Number of Other Fire Staff:	0		
Number of PFT funded by Preparedness:	0		
Number of Career Seasonals funded by Preparedness:	0		
Number of Temporaries funded by Preparedness:	0		
Number of PFT funded by Fuels:	2		
Number of Career Seasonals funded by Fuels:	1		
Number of Temporaries funded by Fuels:	1		

Assistance Agreements and Intra/Interagency Agreements

The following is a list of agreements that pertain to fire management activities for the Field Office:

Cooperative Fire Protection Agreement between United States Department of Interior Bureau of Land Management Montana and Dakotas, National Park Service Intermountain Region, Bureau of Indian Affairs Pacific Northwest and Rocky Mountain Regions, U.S. Fish and Wildlife Mountain-Prairie Region, United States Department of Agriculture Forest Service Northern Region and The State of Montana Department of Natural Resources and Conservation – this plan is the master agreement that exchanges fire protection responsibilities.

Annual Operating Plan for the Montana Department of Natural Resources and Conservation Southwestern Land Office and the Bureau of Land Management Missoula and Butte Field Offices and the United States Department of Agriculture Forest Service Lolo National Forest - this plan covers the operational procedures for initial attack and other incident support activities for a portion of the Field Office.

Missoula Dispatch Annual Operating Plan – this plan covers the operations of the Missoula Interagency Dispatch Center.

VI. MONITORING AND EVALUATION

Monitoring and evaluating of the fire program will occur to determine if the program and associated projects are meeting the various resource plans directions and to determine if the costs of implementing the fire program and management effects are occurring as predicted.

Monitoring related to wildland fire or fire related projects falls under the general monitoring and evaluation guidelines outlined in the Resource Management Plan. Site specific monitoring needs are identified in analysis for individual fire related projects.

As required in the Interagency Standards for Fire and Fire Aviation Operations the MiFO will evaluate its program annually to ensure accountability, facilitate resolution of conflict, and identify resource shortages and priorities. This process will be facilitated through the annual review of interagency operating agreements, the completion of readiness reviews, formal program reviews, the FPA process, and by performing after action reviews of fuels management projects by the fuels ID team.